

Title (en)

BED MEDIUM FOR A FLUIDIZED BED COMBUSTOR OR GASIFIER

Title (de)

BETTMEDIUM FÜR EINE WIRBELSCHICHTBRENNKAMMER ODER EINEN VERGASER

Title (fr)

MILIEU FLUIDE POUR UN BRÛLEUR À LIT FLUIDISÉ OU GAZÉIFICATEUR

Publication

EP 3677834 C0 20230621 (EN)

Application

EP 19741722 A 20190116

Priority

- JP 2018007060 A 20180119
- JP 2019001054 W 20190116

Abstract (en)

[origin: EP3677834A1] The present invention provides a useful fluidized medium for a fluidized bed, the fluidized medium having excellent fluidity and being suitable for use as a fluidized medium in a fluidized bed furnace that uses biomass material and coal as fuel. The present invention also provides a useful fluidized medium for a fluidized bed, the fluidized medium having excellent durability, not easily forming an aggregate of particles, and not being easily destroyed. Used as the fluidized medium for a fluidized bed in a fluidized bed furnace that is used to combust or gasify fuel comprising biomass material and/or coal is a fluidized medium that comprises artificially produced spherical refractory particles having a chemical composition comprising 40 wt% or more of Al₂O₃ and 60 wt% or less of SiO₂, having an apparent porosity of 5% or less, and having a weight ratio of 20% or less of aggregated particles after a heating treatment test has been repeated three times at 900°Cx2 hours in coexistence with the fuel.

IPC 8 full level

F23C 10/18 (2006.01); **C21D 1/53** (2006.01); **C21D 1/74** (2006.01); **C21D 9/00** (2006.01); **C21D 9/567** (2006.01); **F23C 10/01** (2006.01); **F23G 5/30** (2006.01)

CPC (source: EP KR US)

C21D 1/53 (2013.01 - EP US); **C21D 1/74** (2013.01 - EP); **C21D 9/0006** (2013.01 - EP); **C21D 9/567** (2013.01 - EP); **F23C 10/01** (2013.01 - EP KR US); **F23C 10/18** (2013.01 - EP US); **F23C 10/30** (2013.01 - KR); **F23G 5/027** (2013.01 - KR); **F23G 5/30** (2013.01 - EP KR); **F23G 5/30** (2013.01 - US); **F23G 2201/40** (2013.01 - KR)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Participating member state (EPC – UP)

AT BE BG DE DK EE FI FR IT LT LU LV MT NL PT SE SI

DOCDB simple family (publication)

EP 3677834 A1 20200708; EP 3677834 A4 20210616; EP 3677834 B1 20230621; EP 3677834 C0 20230621; BR 112020010357 A2 20201110; CN 111133253 A 20200508; CN 111133253 B 20211210; JP 2019124431 A 20190725; JP 6410973 B1 20181024; KR 102352026 B1 20220114; KR 20200042915 A 20200424; US 11236904 B2 20220201; US 2020217499 A1 20200709; WO 2019142814 A1 20190725

DOCDB simple family (application)

EP 19741722 A 20190116; BR 112020010357 A 20190116; CN 201980004652 A 20190116; JP 2018007060 A 20180119; JP 2019001054 W 20190116; KR 20207007795 A 20190116; US 202016823847 A 20200319